

# Attachment E

Infrastructure Report for Referral Application

## Hughes Developments Limited

160 Bangor Road • Darfield

21112

October 2025



Shaping the future since 1880

## Table of Contents

1.	GENERAL .....	1
1.1	Introduction .....	1
1.2	Legal Description.....	1
1.3	Topography .....	1
1.4	Water Races .....	1
1.5	Soils .....	2
1.6	Site Contamination .....	2
1.7	Development Staging.....	2
2.	EARTHWORKS .....	3
3.	ROADING AND ACCESS .....	3
3.1	Existing Road Network.....	4
3.2	Road Design .....	4
4.	STORMWATER .....	5
4.1	Stormwater Design .....	5
4.2	Flood Flows .....	5
5.	Wastewater .....	5
5.1	Existing wastewater system.....	5
5.2	Wastewater Design.....	6
6.	WATER SUPPLY .....	7
6.1	Existing Water Supply Network .....	7
6.2	Proposed Water Supply Network .....	8
7.	ELECTRICITY AND STREET LIGHTING.....	8
8.	TELECOMMUNICATIONS.....	9
9.	CONCLUSION .....	9
	Appendix A: Site Plan.....	
	Appendix B: Darfield Wastewater Master Plan.....	
	Appendix C: Existing Water Supply Network.....	
	Appendix D: Orion Capacity Letter .....	
	Appendix E: Chorus Capacity Letter .....	

Compiled by:	Jamie Verstappen		14/10/2025
--------------	------------------	---	------------

## **1. GENERAL**

### **1.1 Introduction**

This preliminary infrastructure report addresses the future infrastructure required to service the proposed development of approximately 130.4ha of land located at Darfield, Canterbury. The land is located on the northwestern side of the Darfield Township. A site plan is included in Appendix A.

It is proposed to create between 700 and 800 residential lots. There is a possibility some of the site will contain a small commercial area and a school site approximately 4ha in size. For the purposes of determining infrastructure loadings a total of 800 new dwellings will be used which equates to an overall density of 6.13 lots per hectare. Lots will vary in size between 650m<sup>2</sup> to greater than 1 hectare.

The site is bounded by SH73 to the east, Bangor Road to the south, existing rural lifestyle blocks to the southeast and west, and rural land to the north. A block of land owned by the Selwyn District Council which accommodates a water extraction facility is also located on the northern boundary of the site.

The site encompasses the entire Darfield 3 Development Area. It is noted in the ODP that the sites within the development area should average 1ha in size however the infrastructure, roading and general layout should allow future proofing for further subdivision. This proposal provides a higher development density than is stipulated by the ODP at the outset which will allow for a more economical provision of infrastructure and provide more surety that the development area will remain adequately serviced in years to come.

The proposed subdivision infrastructure construction will comply with the requirements of SDC's Code of Practice and all future consents relating to the site to ensure vesting in SDC upon completion.

The purpose of this report is to provide an assessment of the servicing of the proposed residential development with respect to road access, wastewater, water supply, stormwater, electricity and telecommunications infrastructure.

### **1.2 Legal Description**

The legal description for the site is Lot 2 DP 81020 and Section 2 SO 438579 at 160 Bangor Road.

### **1.3 Topography**

The topography of the site is relatively flat and level, with a slight fall towards the southern side of the site. The maximum variation in ground level across the site is approximately 9m over the 1200m site length from Bangor Road.

The existing site area is predominantly in pasture and is currently in use for rural purposes. Large mature hedges are located along fence lines within the land.

### **1.4 Water Races**

There are two SDC water races which are part of the Malvern Water Race Scheme within the site. One water race enters the site at the northern boundary and traverses the site from north to south exiting at the southernmost corner at Bangor Road. The second water race runs along the south eastern boundary and leaves the site running under West Coast Road (SH73).

These water races will be protected and maintained during development works. The water races will be incorporated within the road and reserve network where possible. Minor re-alignments and culverts beneath roads and for residential access will be required to ensure flow is maintained following development of the site.

## 1.5 Soils

A geotechnical investigation was undertaken for the site in June 2024. This geotechnical investigation was undertaken by ENGEO and includes information regarding the soil profile beneath the site, groundwater levels and the anticipated seismic performance of the site. Information was gathered from the relevant available geotechnical databases and site investigations including both scale penetrometer testing and machine excavated test pits.

These geotechnical investigations conclude the soil profile beneath the site can be describes as: 0.2m to 0.3m of topsoil overlying 0.2m to 0.7m of silts and sands overlying natural medium dense to dense gravels to at least 265m depth. The ECan regional groundwater depth is interpreted to be present at 50m depth, however it may be significantly deeper than this. The site is generally considered to meet the 'Good Ground' classification as defined in NZS 3604:2011 and is deemed suitable for residential use.

The Canterbury Earthquake Recovery Authority has categorised the site as 'N/A Rural and Unmapped however due to the ground conditions beneath the site and the relatively low groundwater depth the site is anticipated to perform as equivalent TC1. There are no known or mapped faults in the immediate area of the site.

Please see the geotechnical investigations for complete information regarding the geotechnical conditions at the site.

## 1.6 Site Contamination

A combined Preliminary and Detailed Site Investigation was undertaken by ENGEO for the 160 Bangor Road property in June 2024. This investigation concludes the site has been used for agricultural purposes since before 1940. A number of sites of interest within the site were identified, these include: offal pits, burn pits, fuel storage areas, livestock dips and buildings which may contain asbestos. These areas were tested for contaminants with results showing contamination above allowable residential thresholds in some locations. Further investigation is recommended to delineate the contaminated areas for removal under a Remedial Action Plan.

## 1.7 Development Staging

The development will be constructed in stages. The location and size of the stages will be determined by the servicing requirements, roading access, efficiencies of construction and the expected uptake of new residential lots created within the site.

Preliminary forecasting for the development has been undertaken and this shows that stages of around 65-70 lots could be constructed and sold on a rolling 9 month construction plan. This would see the development completed in around 8-9 years.

## 2. EARTHWORKS

From the geotechnical investigations for the site we would expect to find interbedded variable density sands, silts and gravels underlying variable depth topsoil across the site. It is expected that all soil encountered within the site will be suitable for filling to residential development standards.

The construction of the subdivision will be possible in any season, however wind erosion may be an issue with excavation over summer months in this area coupled with the natural soil conditions. Mitigation measures such as an onsite water cart and dust suppressant polymer application will need to be employed to control dust.

It should also be noted that during the construction process the containment and disposal of potentially sediment laden stormwater flows would need to be carried out. To ensure this is managed appropriately an erosion and sediment control management plan must be implemented. This plan will also need to be submitted and approved by both SDC and Environment Canterbury.

A key intention of the earthworks design across the site will be to maintain the existing landform as closely as possible to minimise soil disturbing activities and to maintain natural drainage patterns. The majority of the required earthworks will be within the roads to create conveyance capacity and storage for stormwater and flood flow. Earthworks within the larger lots will be limited to a strip along their road frontage to tie into the berm levels and create level access to the lots. Smaller lots will be shaped to ensure level building platforms are available at a suitable height to achieve the required flood clearance. When maintaining the natural landform it is noted that there will be some flow across boundaries in larger rainfall events. To reduce the severity of this overland flow a consent notice will be proposed for all new lots which will require private soakpits servicing buildings and driveways to be designed to dispose of the 2% AEP of all durations up to and including the 24 hour event.

It is anticipated that around 115,000 m<sup>3</sup> of soil will need to be cut and filled to establish building lots and roading within the site. While detailed design has yet to occur it is likely that the maximum cut and fill depths will be approximately 1m to create new roads and to fill natural depressions within lots. Furthermore, the likely maximum depth of excavation for drainage works is likely to be around 4m for the installation of a new pump station and to construct soakpits within the site. Roads and reserve links will be used as secondary flow conveyance to ensure flood water can be safely conveyed through the site in the event the onsite stormwater disposal systems become inundated.

All earthworks are required to be carried out in accordance with NZS 4431:2022 and will involve the stripping of topsoil to stockpile, the bulk cut to fill earthworks and finally reinstatement of the topsoil and grass. We would expect that the earthworks will be a balanced cut and fill and no material will be removed from site unless it is of an unsuitable nature.

An erosion and sediment control plan and dust management plan will be prepared and submitted to both Selwyn District Council and ECan for approval prior to construction activities occurring on the site.

## 3. ROADING AND ACCESS

The development will incorporate a number of collector roads reflecting the Master Plan prepared by Urban Acumen Limited.

Novo Group have prepared a high level report which outlines the possible upgrades to the roads which the development will connect onto.

### 3.1 Existing Road Network

Two new road access points are proposed from Bangor Road, this is in line with the ODP. The new intersections with Bangor Road will include carriageway widening, kerb and channel, asphalt surfacing to the centreline and streetlighting. The existing shallow swale and tree belt along the remainder of the Bangor Road berm will be tidied to ensure road drainage is easily maintained, otherwise it will remain in its current condition. The current speed limit along Bangor Road is 80 km/h, as such vehicle access to new lots fronting this road will need to be constructed to SDC rural access standards.

SH73 fronts the eastern boundary of the site. There is no road access from the development site to SH73 proposed, however a reserve link and shared path will be installed to provide for pedestrian and cycle movements in this direction.

### 3.2 Road Design

The proposed carriageway widths within the site will vary between 8m and 9m. Legal widths are proposed to be between 20m and 24m. Right of Ways will achieve the minimum widths specified within the district plan. Roading features such as thresholds, footpath crossings and intersections may be surfaced with cobblestones or other suitable materials at the discretion of SDC, this will be confirmed during detailed design. The proposed roading layout provides a suitable level of traffic permeability through the site and is generally in line with the ODP for the development area.

Roads within the site will be formed with crossfall towards either roadside swales in lower density areas or kerb and channel in higher density areas. The grassed swales will be located within the berm areas and will provide conveyance for stormwater discharge from roads and lot frontages. The swales will be approximately 500mm deep and vehicle crossings which cross swales will require culverts. Kerb and channel will be provided at all road intersections to clearly delineate the edge of carriageway and protect against edge break.

The natural soil conditions at the site are expected to provide a suitable subgrade for new road pavements. Further testing will be undertaken to determine the subgrade CBR to be adopted for detailed pavement design. All roads and Right of Ways will be surfaced with 2 coat chipseal and intersections or higher volume roads with 35mm of DG10 asphalt to protect against surface damage due to turning movements.

Footpaths and cycleway access will be provided throughout the development site as shown on the Master Plan prepared by Urban Acumen. The two main boulevard style entrance roads will include a 2.5m shared path on one side and a 1.8m footpath on the other. The remainder of the roads will include a single 1.8m wide footpath or 2.5m wide shared path. A network of 2.5m shared paths will link the reserve areas throughout the site. Street trees will be provided with road berms and new roads will be lit to Council standards.

Due to the relatively flat site topography, road gradients will be minimal. To ensure the roads drain adequately, kerb and channel gradients will be no shallower than 1:500 and crossfall will be provided on all new pavements in accordance with the SDC Code of Practice. The road levels will be set to ensure secondary and flood flows are managed and directed away from building platforms within the road and reserve corridors. Secondary flow in the event of flooding can be directed off site following natural overland flow paths.

## 4. STORMWATER

### 4.1 Stormwater Design

The soil conditions on site will be suitable for stormwater disposal to ground. Stormwater emanating from roofs and hardstand areas on private lots will be directed to ground within the lot in accordance with the New Zealand Building Code. Where secondary discharge to the street frontage cannot be provided, lots will be required to provide soakpits to dispose of the 2% AEP of any duration up to and including 24 hours from roofs and hardstand areas (or other requirements stipulated by ECan discharge consents).

All other stormwater from the road network within the site will be directed to the roadside swales. These swales will then convey stormwater to boulder backfilled soakpits located beneath the road berms which will be designed to accommodate the 2% AEP rainfall event of critical duration. All flow over and above the 2% AEP storm event will be stored within the roadside swales and if required directed away from the development area by secondary flow channels along the roads towards the south.

Due to low contaminant levels anticipated in the stormwater runoff for the residential development and the depth to groundwater at the site no treatment requirements are expected beyond the low maintenance vegetated swales proposed. Submerged inlets to soakpit manholes will floatable contaminant and rubbish to prior to entering the stormwater soakage facilities. The proposed swales will provide for stormwater conveyance and a level of additional treatment prior to discharge to ground.

All stormwater infrastructure is to be constructed in accordance with the SDC Code of Practice to enable it to be vested upon completion of the construction defects period.

Consent for the discharge of both construction and operational stormwater discharge will be sought from ECan. Construction stormwater will be captured on site and conveyed to temporary soakpits located in accordance with the ESCMP and the ECan Erosion and Sediment Control Toolbox will be used as the basis for sediment control on site. Following vesting of the stormwater network and once the nominated defects period is complete the operational stormwater discharge consent for the subdivision will be transferred to SDC.

### 4.2 Flood Flows

Selwyn District Council has with the help of Environment Canterbury identified land across the Selwyn District which may be susceptible to flooding. The proposed development site has been shown to be affected by flooding in both the 1 in 200 year and 1 in 500 year storm events.

Through the engineering approval process a Flood Assessment Certificate will be applied for to determine the required finished floor levels of new dwellings within the site. This will ensure all dwellings constructed within the site achieve at least 300mm clearance to the 1 in 200 year flood level. This approach is consistent with other developments in Selwyn.

## 5. Wastewater

### 5.1 Existing wastewater system

The Darfield township has recently been serviced by a gravity sewer pipe connection back to the Pines Wastewater Treatment Plant in Rolleston. This pipe has been extended to the corner of Owen Drive and Telegraph Road and is 375mm in diameter. The intention is that all existing Darfield residential areas and future residential areas will eventually be connected to this pipe network which will replace the need for septic tank systems. This 375mm sewer pipe has capacity to discharge up

to 100 l/s of wastewater. This equates to 3,636 households using the calculation specified in the SDC ECoP.

A sewer pump station has been constructed at the southernmost extent of the Darfield residential area to lift wastewater into this 375mm sewer pipe. The pump station has been designed to pump up to 60 l/s in its first phase of operation. Further upgrading to achieve the full discharge of capacity of 100 l/s can be undertaken as and when necessary as more development and connections to existing dwellings are undertaken.

From this pump station, a 300mm gravity main has been installed along Telegraph Road, through the exiting Darfield town centre, to service new development land at Kimberley Road on the northern side of Darfield. This gravity main has been designed to accommodate discharge from the site and surrounding residential areas, both existing and undeveloped. As detailed on the attached sewer catchment plan within Appendix B, the development area north of Bangor Road has an allocated flow allowance of 16.9 l/s.

It is understood there are no current network capacity constraints within the pipeline from Darfield to The Pines WWTP and The Pines WWTP has going and future planned upgrades to enable treatment capacity for continued development within the Eastern Selwyn Sewage Scheme.

## 5.2 Wastewater Design

The eventual gravity sewer connection to Bangor Road will need to be constructed through downstream development area and is unlikely to be available when development of the site is being undertaken. It is also unlikely this sewer connection will have sufficient cover to service the complete site. As such, a wastewater pumping arrangement will be required. The most economical point of discharge to the gravity network would be at the corner of Cardale Street and Telegraph Road following the next phase of Council works to extend the network. This would require approximately 1800m of rising main.

An alternative to this would be to install the gravity main as near as possible to the site through undeveloped land and existing residential areas. The cost of this gravity network construction would fall on Council but could be offset somewhat by savings associated with a decrease in rising main length. This would provide a good outcome to Council by enabling a significant quantity of existing residential dwellings to connect to the reticulated network, greatly reducing the wastewater loading to ground. Further consultation with Council will be undertaken regarding this.

The proposed pump station is proposed to be located at the eastern entrance from Bangor Road, this is the lowest point of the site. The relatively even gradient of approximately 1:150 across the site and generally lends itself well to a gravity sewer network discharging to this location. The exception being the southeastern corner of the site where natural ground levels might dictate that a small area will require private sewer pumps. Larger lots around the perimeter of the site are also intended to be serviced by private sewer pumps to limit the gravity main depths in roads. Private sewer pumps have additional benefits for the management of wastewater flow: the ability to reduce wastewater flow during times of peak usage and reducing stormwater infiltration and inflow. Thus, the use of private sewer pumps for a portion of the site will result in a lower peak loading on the downstream network.

Given the above design considerations, the depth of the gravity pipe network at the pump station is expected to be around 2.5m deep and the pump station wetwell depth to be around 4m deep.

The wastewater flow from the 800 lots proposed can be calculated as 5.5 l/s (ASF) and 22 l/s (MF) using the SDC ECoP. The maximum flow has been calculated using the full storm peak factor of 1.6, where in reality this will be substantially less given the significant depth to groundwater, high permeability of soils across the site and the use of private pumps for a portion of the site. A more realistic maximum flow would be near to 19.25 l/s using a combined P/A and SPF factor of 3.5. No allowance for further densification is applied as all lots within the site will be limited in their ability to further subdivide through consent notice.

Although this flow is greater than the original allowance for the catchment, the downstream pipe network is expected to have capacity to accommodate this modest increase in flow. This will be confirmed with Council during detailed design and if necessary additional buffer storage can be installed at the pump station facility within the site to contain surplus wastewater in the unlikely event the downstream network is overloaded. Emergency storage equivalent to 8 hours ASF will also need to be installed within the network local to the catchment.

The gravity network within the site will consist of 150mm sewer mains installed at a minimum gradient of 1 in 200. Flushing tanks will be provided to ensure self-cleansing flow is achieved if gradients less than 1:200 are required to service the most upstream areas in the catchment. Each lot will be serviced by a 100mm lateral installed at least 1m into the net area of the site, or for larger perimeter lots serviced by pressure pumps, to a chamber at the ROW entrance. The target depth of sewer laterals at the road boundary will be 1.2m to ensure vertical clearance from infrastructure located in the road berms and to ensure the larger sites can be serviced by gravity.

The density proposed will greatly reduce the potential for further subdivision within the site which will ensure the network installed through the initial development works is fit for purpose and any over design to cater for varying scenarios of further subdivision in future can be avoided.

All sewer network installation will be constructed in accordance with the SDC Code of Practice.

## **6. WATER SUPPLY**

### **6.1 Existing Water Supply Network**

SDC has existing water supply reticulation in the area, supplied by several groundwater extraction wells. The Council well nearest to the site is located in the Council owned land at the northern boundary of the site. A 300mm PVC pipe connects this well to the local water supply network through an easement along the northern boundary of the site. SDC have indicated the current water extraction consent held by Council will be able to provide the required supply capacity for the site and all other planned development areas within the township.

This water take consent is labelled CRC245098 which allows up to 6,000m<sup>3</sup> of groundwater extraction per day. The maximum yearly limit is based on the estimated population within the serviced township being provided 0.519m<sup>3</sup> per person with a 20% buffer allowance. Theoretically the maximum population base which can be serviced by this consent can be calculated as 9,634. The current population of the Darfield township is estimated to be less than 4,000.

A 150mm PVC or 180mm ODPE watermain is installed along Bangor Road for complete frontage of the site, this will be the point of connection for initial development stages. This watermain reduces A 200mm watermain is located along the eastern berm of SH73. The existing water supply network is shown within Appendix C.

There are two existing bores within the site which are used for domestic supply and irrigation. These will be maintained for use during construction and decommissioned when the area surrounding them is developed. These bores are identified as L35/0276 and L35/0277.

## 6.2 Proposed Water Supply Network

The peak water supply loading of the proposed development of 800 lots is 104 l/s, calculated using SDC ECoP. No further allowance for densification is necessary. Firefighting requirements for the site will require a peak flow rate of 25 l/s combined with 60% of the residential peak which equates to 87.4 l/s.

Water within the development will be supplied by a reticulated pipe system located within the road berms. Water mains will be linked to the surrounding network at two locations along Bangor Road. Connections to the 300mm pipe at the northern boundary of the site and 200mm pipe within SH73 are also possible subject to Council approval. It is expected at least three watermain connections to the surrounding network will be required to service the complete development. These connections can be progressively undertaken as required by the proposed staging and number of connections to be provided within each stage. If connections through future development areas are required these connections will be protected by an easement in gross. Council engineers have indicated that a trunk main through the site from SH73 to Bangor Road is required for network reinforcement. This will be incorporated into the network design within the site.

A complete water supply model for the site will be undertaken during detailed design. No upgrades to the surrounding Council network are anticipated.

63mm submains will be installed as required within the opposite berm to the watermains to ensure water supply is available at the frontage of all new lots. 32mm ODPE metered water connections will be provided to each property boundary as per council standards. It is expected all water infrastructure will be vested in SDC upon completion of construction. In line with the ODP, all lots will also be required to have a rainwater harvesting tank installed with a pump which can be used for landscape watering and domestic water supply.

The proposed subdivision density, which is higher than envisaged by the ODP, will ensure that the eventual peak water loading can be more accurately estimated during the initial stages of design and construction which will ensure the network can provide sufficient supply for future.

The water supply system will be designed to meet the flow and pressure required by the New Zealand Fire Service Code of Practice. Hydrants will also be placed in accordance and water modelling will be undertaken during detailed design phase to ensure these requirements are met.

## 7. ELECTRICITY AND STREET LIGHTING

The existing house within the site is currently serviced for power supply by overhead lines which enter the site from the west. This existing supply will become redundant through the development works and will be removed when it is no longer required.

Preliminary consultation with Orion has indicated that power can be provided for up to 800 new lots within the development site. The infrastructure will be laid underground in the roading reserve. It is estimated up to 15 new kiosks will be required for the proposed development density. Connection to the HV network is available at Bangor Road. All lots within the development will be provided with a power supply connection at the lot boundary. All power reticulation installed within the site will be taken over by Orion upon completion.

Streetlighting will need to be installed to residential standards as part of the proposed development works. All streetlighting will be located in the vested road reserve.

A power supply capacity letter has been provided by Orion. This is attached as Appendix D.

## **8. TELECOMMUNICATIONS**

The site is currently serviced by Chorus via their standard rural supply. The Chorus fibre telecommunications network is available near to the site and the extension of their network within the site to service each new lot has been confirmed. A letter confirming availability of their network to service the proposal is attached as Appendix E.

The telecommunications network will be installed within the road berms and handed over to Chorus upon completion.

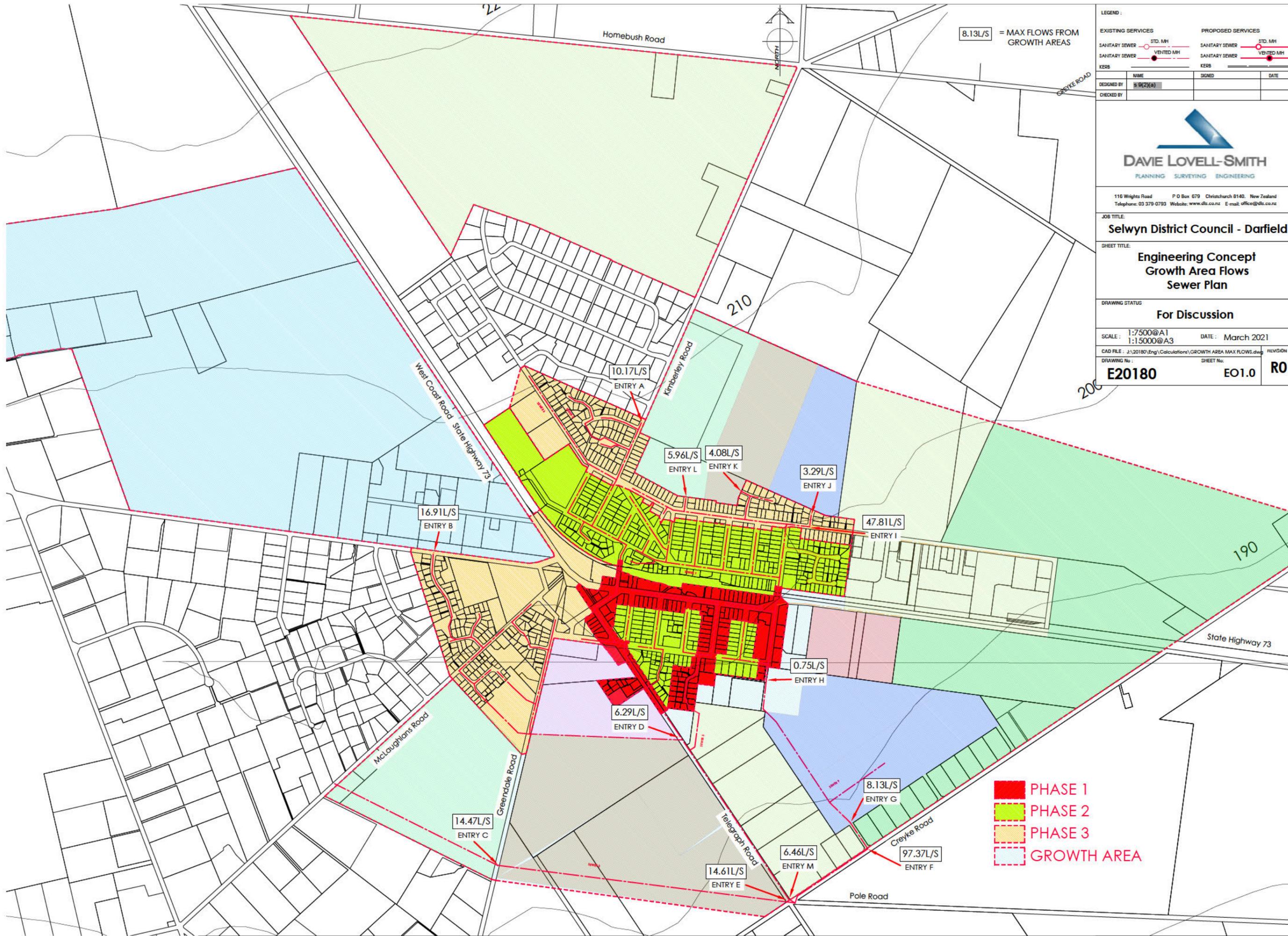
## **9. CONCLUSION**

The infrastructure for sewer, water supply, telecommunications and power supply are all sufficiently available to ensure this proposal can be easily serviced. Coordination of various infrastructure work items with SDC will be required to maintain network capacity for the existing and future development within Darfield and to ensure the infrastructure installed within this proposal aligns with strategic servicing plans. With the above measures in place, the potential effects of the proposal regarding capacity and functioning of the existing networks and on the environment will be negligible.

## Appendix A: Site Plan



## Appendix B: Darfield Wastewater Master Plan



**LEGEND:**

EXISTING SERVICES		PROPOSED SERVICES	
SANITARY SEWER	STD. MH	SANITARY SEWER	STD. MH
SANITARY SEWER	VENTED MH	SANITARY SEWER	VENTED MH
KERB		KERB	

DESIGNED BY	NAME	SIGNED	DATE
CHECKED BY			

**DAVE LOVELL-SMITH**  
PLANNING SURVEYING ENGINEERING

118 Wrights Road P O Box 679 Christchurch 8140, New Zealand  
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

**JOB TITLE:**  
Selwyn District Council - Darfield

**SHEET TITLE:**  
Engineering Concept  
Growth Area Flows  
Sewer Plan

**DRAWING STATUS:**  
For Discussion

**SCALE:** 1:7500@A1  
1:15000@A3

**DATE:** March 2021

**CAD FILE:** J:\20180\Eng\Calculators\GROWTH AREA MAX FLOWS.dwg

**DRAWING No:** E20180

**SHEET No:** EO1.0

**REVISION:** R0

## Appendix C: Existing Water Supply Network



## Appendix D: Orion Capacity Letter

17.10.2025

Reference ORN1022247

Jamie Verstappen  
s 9(2)(b)(ii)  
Christchurch  
Christchurch 8024

Dear Jamie

## Proposed subdivision – 160 Bangor Road Darfield Selwyn

Thank you for your request for a letter to confirm there is capacity on the Orion network to service the electrical needs of your proposed subdivision.

This letter is not suitable for 224 clearance purposes.

I confirm:

1. Orion has the capacity on the network to meet your request.
2. There are no specific connections available for this subdivision however:
  - a. A connection can be made available for 800 dwellings subject to alteration to the Orion network; and
  - b. It is likely Orion will need to either upgrade existing network or lay new cables to create these connections. We recommend the developer engages an authorised Orion subdivision designer to help you through this process and submit a suitable design proposal so that your development may connect to the Orion network.
  - c. There will be costs associated in providing the connection(s). The costs payable will be in accordance with the Orion [*extensions and connections or subdivision*] policy and will be the responsibility of the property owner.
  - d. The next step will be to apply for a connection online at [www.oriongroup.co.nz](http://www.oriongroup.co.nz) under “get connected”.
3. Orion will request an easement in gross for all over boundary existing network not currently secured by way of easement at the developers cost prior to the issuing 224 clearance.
4. To comply with Orion’s network security conditions an alternative feed from adjoining developments may also be required.
5. All proposed new structures near or under existing overhead lines (eg house, sheds, carports, garages or any other structures) must comply with the distances stated in the New Zealand Electrical Code of Practice for Electrical Safe Distances 2001 (NZECP34:2001).

6. **IMPORTANT:** This Capacity Letter will expire upon the earlier of the date upon which a connection for each of the lots for the development has been approved and lived in or 6 months from the date of this letter in the case of a residential/rural subdivisions or, 12 months in the case of a commercial/industrial subdivision.

All terms and conditions will be subject to current Orion policies and practices.

Please contact me if you require any further information.

Yours faithfully

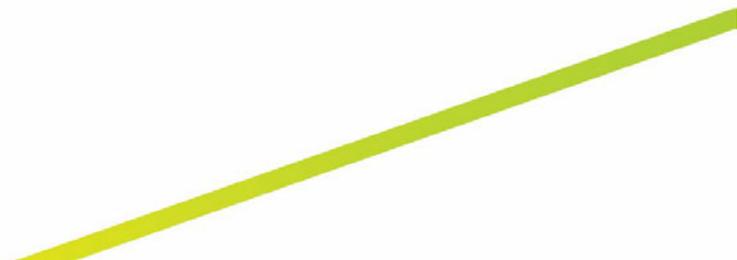


**Mark Williams**

**Contract Mgr Connections (NS)**

Email s 9(2)(a)

Phone



## Appendix E: Chorus Capacity Letter

Chorus NZ Ltd  
4 Graham Street  
Auckland CBD  
Auckland

Jamie Verstappen  
Davie Lovell- Smith  
s 9(2)(b)(ii)  
Addington  
CHRISTCHURCH

2<sup>nd</sup> October 2025

Hi Jamie,

Thank you for providing an indication of your development plans in the Darfield area. I can confirm that we have infrastructure in the general land area that you are proposing to develop at Bangor Road, Darfield.

Chorus will be able to extend our network to provide connection availability. However, please note that this undertaking would of course be subject to Chorus understanding the final total property connections that we would be providing, roll-out of property releases/dates and what investment may or may not be required from yourselves and

Chorus to deliver the infrastructure to and throughout the site in as seamless and practical way as possible.

The cost can only be finalised at the time that you are ready to proceed.

Chorus is happy to work with you on this project as the network infrastructure provider of choice. What this ultimately means is that the end customers (business and homeowners) will have their choice of any retail service providers to take their end use services from once we work with you to provide the physical infrastructure.

Please reapply with a detailed site plan once you are ready to proceed.

Kind Regards,

Margaret Singh  
Group Account Manager  
**Chorus NZ Ltd**  
s 9(2)(a)